

## IN THE CLAIMS

Please amend the claims as indicated below. A redlined version of the amended paragraphs is attached to this response as Appendix B.

Please replace the claims identified below with the following amended claims:

C2 1. A method for communicating messages to a mobile station by a wireless communication system providing access to a decentralized data network, the method comprising the steps of:

- providing a sequence of messages;
- providing for each respective message a respective signature, the respective signature being separate from the respective message; and
- comparing the respective signature for any given respective message with at least one signature.

C3 63. A method for communicating with a mobile station by way of a forward  
2 channel in a wireless communication system, the method comprising:

- transmitting a message capsule over the forward channel;
- 4 generating a signature for the message capsule;
- transmitting the signature in a separate signature capsule over the forward  
6 channel; and
- comparing the signature with one or more signatures previously stored at  
8 the mobile station.

64. A method for communicating with a mobile station by way of a forward  
2 channel in a wireless communication system, the method comprising:

- transmitting a message capsule over the forward channel;
- 4 calculating a signature from the message capsule at the mobile station;
- and

6 comparing the signature with one or more signatures previously stored at  
the mobile station.

65. An apparatus for communicating with a mobile station by way of a forward  
2 channel in a wireless communication system, comprising:

a base station configured to:

4 transmit a message capsule over the forward channel;

generate a signature for the message capsule; and

6 transmit a signature in a separate signature capsule over the  
forward channel; and

8 a mobile station configured to compare the signature with one or more  
signatures previously stored at said mobile station.

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cont. 2 66. An apparatus as claimed in claim 65, wherein said mobile station is further  
configured to sleep if the signature matches one of the previously stored  
signatures.

67. An apparatus as claimed in claim 66, wherein said mobile station is  
2 configured to sleep while the message capsule is being transmitted over the  
forward channel.

68. An apparatus as claimed in claim 65, wherein said mobile station is further  
2 configured to listen for the message capsule if the signature does not match one  
of the previously stored signatures.

69. An apparatus as claimed in claim 68, wherein said mobile station is  
2 configured to listen only until the message capsule is received.

70. An apparatus as claimed in claim 69, wherein said mobile station is  
2 configured to sleep after the message capsule is received.

2 71. An apparatus as claimed in claim 70, wherein said mobile station is configured to wake up after sleeping.

2 72. An apparatus as claimed in claim 70, wherein said mobile station is configured to wake up after sleeping for 5.2 seconds.

2 73. An apparatus as claimed in claim 68, wherein said mobile station is configured to listen for a second message capsule whose signature does not match one of the previously stored signatures, wherein the listening is done until  
4 the second message capsule is received.

2 74. An apparatus as claimed in claim 73, wherein said mobile station is configured to sleep after the second message capsule is received.

2 75. An apparatus as claimed in claim 73, wherein said mobile station is further configured to listen for a third message capsule whose signature does not match one of the previously stored signatures, wherein the listening is done until the  
4 third message capsule is received.

2 76. An apparatus as claimed in claim 75, wherein said mobile station is configured to sleep after the third message capsule is received.

2 77. An apparatus as claimed in claim 68, wherein said mobile station is configured to stop listening if there are no more message capsules whose signatures do not match one of the previously stored signatures.

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E1 2 78. An apparatus as claimed in claim 1, wherein the message capsule is one of a sequence of message capsules carrying overhead messages.

79. An apparatus as claimed in claim 78, wherein the sequence is periodically  
2 transmitted by the wireless communication system.

80. An apparatus as claimed in claim 78, wherein the sequence is  
2 aperiodically transmitted by the wireless communication system.

81. An apparatus as claimed in claim 1, wherein the signature is generated by  
2 hashing the message capsule.

82. An apparatus as claimed in claim 81, wherein the hashing comprises  
2 hashing the message capsule to generate a first hash and rehashing the  
4 message capsule if the first hash of the message matches a signature of a  
previous message capsule.

83. An apparatus as claimed in claim 82, wherein the rehashing comprises  
2 adding a random value to the first hash.

84. An apparatus as claimed in claim 82, wherein the rehashing is done if the  
2 signature of a previous message capsule was generated within a time period  
 $T_{\text{Delta}}$ .

85. An apparatus as claimed in claim 84, wherein the time period  $T_{\text{Delta}}$  is  
2 larger than the largest allowed sleep time of any mobile station that could be  
communicated with the wireless communication system.

86. An apparatus as claimed in claim 81, wherein the hashing is arranged to  
2 generate a sixteen bit value for the signature.

87. An apparatus as claimed in claim 81, wherein the hashing is arranged to  
2 generate a thirty-two bit value for the signature.

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2 88. An apparatus as claimed in claim 1, wherein the signature is generated by assigning a value stored in a counter.

2 89. An apparatus as claimed in claim 88, wherein the counter is incremented after a signature is generated.

2 90. An apparatus as claimed in claim 88, wherein the counter is incremented if the message capsule is different than a previously transmitted message capsule.

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2 91. An apparatus as claimed in claim 1, wherein the message comprises an overhead message indicative of base station parameters in the wireless communication system.

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2 92. An apparatus as claimed in claim 91, wherein the base station parameters include system parameters, access parameters, channel list, and neighbor list parameters.

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2 93. An apparatus as claimed in claim 1, wherein the message comprises an overhead message indicative of system-wide parameters of the wireless communication system.

2 94. An apparatus as claimed in claim 93, wherein the system wide parameters include system parameters, access parameters, channel list, and neighbor list parameters.

2 95. An apparatus for communicating with a mobile station by way of a forward channel in a wireless communication system, the apparatus comprising:

4 a base station configured to transmit a message capsule over the forward channel; and

said mobile station configured to:

6 generate a signature from the message capsule; and  
compare the signature with one or more signatures previously  
8 stored at the mobile station.

96. An apparatus as claimed in claim 95, wherein said mobile station is further  
2 configured to sleep if the signature matches one of the previously stored  
signatures.

97. An apparatus as claimed in claim 96, wherein said mobile station is  
2 configured to sleep while the message capsule is being transmitted over the  
forward channel.

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Cont- 2 98. An apparatus as claimed in claim 95, wherein said mobile station is further  
configured to listen for the message capsule if the signature does not match one  
of the previously stored signatures.

99. An apparatus as claimed in claim 98, wherein said mobile station is  
2 configured to listen only until the message capsule is received.

100. An apparatus as claimed in claim 99, wherein said mobile station is  
2 configured to sleep after the message capsule is received.

101. An apparatus as claimed in claim 100, wherein said mobile station is  
2 configured to wake up after sleeping.

102. An apparatus as claimed in claim 100, wherein said mobile station is  
2 configured to wake up after sleeping for 5.2 seconds.

103. An apparatus as claimed in claim 98, wherein said mobile station is  
2 configured to listen for a second message capsule whose signature does not

4 match one of the previously stored signatures, wherein the listening is done until  
4 the second message capsule is received.

2 104. An apparatus as claimed in claim 103, wherein said mobile station is  
2 configured to sleep after the second message capsule is received.

2 105. An apparatus as claimed in claim 103, wherein said mobile station is  
2 further configured to listen for a third message capsule whose signature does not  
4 match one of the previously stored signatures, wherein the listening is done until  
4 the third message capsule is received.

2 106. An apparatus as claimed in claim 105, wherein said mobile station is  
2 configured to sleep after the third message capsule is received.

2 107. An apparatus as claimed in claim 98, wherein said mobile station is further  
2 configured to stop listening if there are no more message capsules whose  
signatures do not match one of the previously stored signatures.

2 108. An apparatus as claimed in claim 1, wherein the message capsule is one  
2 of a sequence of message capsules carrying overhead messages.

2 109. An apparatus as claimed in claim 108, wherein the sequence is  
2 periodically transmitted by the wireless communication system.

2 110. An apparatus as claimed in claim 108, wherein the sequence is  
2 aperiodically transmitted by the wireless communication system.

2 111. An apparatus as claimed in claim 1, wherein the signature is generated by  
2 hashing the message capsule.

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112. An apparatus as claimed in claim 111, wherein the hashing comprises  
2 hashing the message capsule to generate a first hash and rehashing the  
message capsule if the first hash of the message matches a signature of a  
4 previous message capsule.

113. An apparatus as claimed in claim 112, wherein the rehashing comprises  
2 adding a random value to the first hash.

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114. An apparatus as claimed in claim 112, wherein the rehashing is done if the  
2 signature of a previous message capsule was generated within a time period  
 $T_{\text{Delta}}$ .

115. An apparatus as claimed in claim 114, wherein the time period  $T_{\text{Delta}}$  is  
2 larger than the largest allowed sleep time of any mobile station that could be  
communicated with the wireless communication system.

116. An apparatus as claimed in claim 111, wherein the hashing is arranged to  
2 generate a sixteen bit value for the signature.

117. An apparatus as claimed in claim 111, wherein the hashing is arranged to  
2 generate a thirty-two bit value for the signature.

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118. An apparatus as claimed in claim 1, wherein the signature is generated by  
2 assigning a value stored in a counter.

119. An apparatus as claimed in claim 118, wherein the counter is incremented  
2 after a signature is generated.



120. An apparatus as claimed in claim 118, further comprising incrementing the  
2 counter if the message capsule is different than a previously transmitted  
message capsule.

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121. An apparatus as claimed in claim 1, wherein the message comprises an  
2 overhead message indicative of base station parameters in the wireless  
communication system.

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122. An apparatus as claimed in claim 121, wherein the base station  
2 parameters include system parameters, access parameters, channel list, and  
neighbor list parameters.

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123. An apparatus as claimed in claim 1, wherein the message comprises an  
2 overhead message indicative of system-wide parameters of the wireless  
communication system.

124. An apparatus as claimed in claim 123, wherein the system wide  
2 parameters include system parameters, access parameters, channel list, and  
neighbor list parameters.

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